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A Criticism on certain new Species of *Panicum*

BY ELMER D. MERRILL

In 1898 there was published in the Journal of the Elisha Mitchell Scientific Society,* a paper on the dichotomous group of *Panicum* in the Eastern United States which was evidently intended to be a monograph of this group, covering the territory from Maine to Minnesota, south to Florida and Indian Territory.

Whatever the author's intentions may have been in publishing this paper, it is evident from a cursory examination of his work that he had neither the collections nor the literature necessary to a thorough investigation of this very difficult group, and has succeeded in doing for science vastly more harm than good by expounding these species in such an unsatisfactory manner. An examination of this work is convincing only of the fact that the author is imbued solely with the idea of species-making for the satisfaction of seeing his own name after certain combinations rather than with any idea of the advancement of science.

The whole paper shows a carelessness in preparation of the descriptions of species, synonymy, and citation of specimens which could have been easily avoided with little care and trouble. Gross ignorance or neglect is at once shown by the fact that of the twenty-one species described as new, five of them bore names which were homonyms, or at least so considered by the author later, synonymy thus being burdened with so many useless names. One would think that the author did not even know of the existence of the Index Kewensis as the names in question are listed in that work, or granting that he did know of this work, he did not take the trouble to consult it.

It seems advisable to make some comment on certain species mentioned below, in order that those unfamiliar with the species of this group may not be deceived. Our knowledge of these "new species" is based almost entirely on material sent by the author as typical, but we are unable to discuss many of these forms intelligently at present, simply because in many cases this typical

* 15 : 22-62. 1898.

material was totally different from the published descriptions of the species to which they were referred. In most cases absolutely nothing can be determined from his descriptions which are mostly short and incomplete, especially those of his first paper.

Panicum commelinaefolium Ashe, 1898, not Kunth, 1833, or Rudge, 1805, = *Panicum Currani* Ashe, 1899.

Panicum maculatum Ashe, 1898, not Aubl., 1775, or Reichb., 1831, = *Panicum Yadkinense* Ashe, 1900.

Panicum Georgianum Ashe, 1898 (*Panicum Cahoonianum* Ashe, 1899). *Panicum Georgianum* is not invalidated by *P. Georgicum* Spreng., 1825.

Panicum annulum Ashe, 1898 (*Panicum Bogueanum* Ashe, 1900). *Panicum annulum* Ashe, is not invalidated by *P. annulatum* A. Rich., 1847.

Panicum glabrissimum Ashe, 1898 (*Panicum Shalotte* Ashe, 1900). *Panicum glabrissimum* Ashe is not invalidated by *P. glaberrimum* Steud., 1855.

While it is unfortunate that the author should apply names in the case of the last three species, so similar to older published ones, we cannot understand on what authority the author proposes new names for the species in question, as there is no reason why the first names should not be retained. *Panicum annulum* Ashe, and *Panicum glabrissimum* Ashe, must stand as a monument to their author's carelessness, while his new names for these two species must be considered only as synonyms. It is very evident that there is little danger of these new names and some others in this paper like *Panicum Mattamusketense* and *P. Huachucae* being homonyms. We have been unable to find any authority for the construction of the word *glabrissimum*.

Of these species *Panicum Georgianum* Ashe (*P. Cahoonianum*) is only the branched state of *P. consanguineum* Kunth, and according to Dr. Small's material in the Herbarium of Columbia University the author is in error in stating that it is a low growing grass as in the type collection the old culms are still attached and match *P. consanguineum* exactly. *Panicum Yadkinense* Ashe was described as a new species under the name of *P. maculatum* Ashe, and is identical with *Panicum dichotomum elatum* Vasey, which is treated in the same paper as a distinct form, the author not recog-

nizing that they were the same. Among other species described in this paper *Panicum calliphyllum* Ashe, we cannot consider to be distinct from *P. xanthophysum* A. Gray. *Panicum Ashei* Pearson, evidently named to gratify the author's desire for fame, as this authority is unknown to systematic botanists, is a small form of *Panicum commutatum* Schultes, but may be worthy of specific rank. In his conception of *Panicum nitidum* Lam., the author is evidently very much at sea as he refers a western form to that species with this remark: "In the extreme west *Panicum nitidum* is represented by *P. thermile* Boland., a rather low, nearly glabrous species." He evidently means *Panicum thermale* Boland., but any one who has seen *Panicum thermale* or even the original description, would certainly not consider it glabrous. *Panicum Mattamusketense* Ashe, 1900, is exactly identical with the type of *Panicum discolor*, co-species *vel. varietas major* Muhl., Desc. 115, 1817, in the Herbarium of the Philadelphia Academy of Sciences. This name, however, will have to be retained as Muhlenberg's var. *major* is antedated by *Panicum nitidum* var. *majus* Pursh, 1814. *Panicum Orangense* Ashe, is exactly *Panicum lanuginosum* Ell., according to a specimen so named by Elliot, in the Herbarium of Columbia University. The first specimen cited under *Panicum haemacarbon* Ashe, is exactly *Panicum Atlanticum* Nash, while other material distributed by the author under this name is *Panicum commonsianum* Ashe. Under *Panicum Huachucae* the mistake is made of applying a local name to a species which, according to the author's statement, extends from Arizona to Iowa and North Carolina, and according to specimens distributed, to New York. We have as yet been unable to separate *Panicum meridionale* and *P. filiculme*, in a satisfactory manner, either by the original descriptions or by comparison of typical material. *Panicum meridionale* may even prove to be unworthy of specific rank. *Panicum microphyllum* Ashe is a doubtful species and the name is invalidated by that of *Panicum zizanioides*, var. *microphyllum* Doell.; Mart. Fl. Bras. 2²: 229. 1877.

In the same publication * this author publishes another article in which one new species of *Panicum*, and one species and variety of *Andropogon* are described, and two new names proposed for

* Journ. Elisha Mitchell Sci. Soc. 15: 112-114. 1899.

species previously published by him. Still later* another paper was published describing 14 new species of *Panicum* and proposing three new names. One might suppose that the author would have benefited somewhat from his previous publications regarding his conception of species, but this apparently is not the case. We have not had an opportunity to study all these proposed species, but the following notes on this last paper may indicate its value to science.

Panicum austro-montanum Ashe, 1900, is exactly *P. Earlei* Nash, 1899. *Panicum pauciciliatum* Ashe we cannot consider distinct from *Panicum Nashianum* Scribn., although the spikelets of the former are somewhat smaller than those of typical *P. Nashianum*. In regard to the latter species, in the first-mentioned paper it was referred to the very distinct *Panicum demissum* Trin., a South American species, while in the present paper both *Panicum demissum* and *P. Nashianum* are mentioned, while what is clearly only a form of the latter is described as a new species. *Panicum Onslowense* Ashe, 1900, cannot be distinguished from *Panicum Webberianum* Nash, 1896, a species that was recognized in the first paper mentioned, but unrecognized and published as a new species in the paper under discussion. *Panicum arenicoloides* Ashe, and *Panicum orthophyllum* Ashe, should both be referred to *Panicum angustifolium* Ell., differing only in being slightly more pubescent and with somewhat smaller spikelets than typical *P. angustifolium*. *Panicum subvillosum* Ashe, 1900, is identical with the form previously described by the same author as *Panicum filiculme*. *Panicum filirameum* Ashe, 1900, is exactly *Panicum arenicolum* Ashe, 1898. *Panicum Mississippense* Ashe, 1900, not *P. glabrum* Mississippiensis Gattinger, 1887, is practically identical with *Panicum inflatum* Scribn. & Smith, differing from the type of the latter only in its greater height, scarcely inflated sheaths, and pale, not purplish color, characters due entirely to habitat. In this last paper it seems evident that the author is the only botanist in this country so fortunate as to know exactly what *Panicum dichotomum* Linn. is, as he speaks of certain forms as being related to that species.

On further study many more of these proposed "new species" will doubtless be found to be simply forms of previously described

* *Ibid.*, 16 : 84-91. 1900.

species and unworthy of specific rank, while some of them will be found to have absolutely no distinctive characters, as illustrated by the "new species" mentioned above.

It is evident from certain collections that we have examined recently that this author purposes to publish more "new species" in this group, as in one small collection in question which had previously been submitted to him, was found three proposed "new species," not one of which is worthy of even varietal rank. In accepting such articles for publication as the ones above discussed, the editor of the Journal of the Elisha Mitchell Scientific Society is open to criticism, as such publications do vastly more harm to science than good.